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10/535,686

05/19/2005

Georg Rudiger Kotzian

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04/30/2009

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EXAMINER

SULLIVAN, DANIELLE D

ART UNIT

PAPER NUMBER

1616

NOTIFICATION DATE

DELIVERY MODE

04/30/2009

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

department-gso.patent@syngenta.com

|                              |                                      |   |  |
|------------------------------|--------------------------------------|---|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/535,686 | <b>Applicant(s)</b><br>KOTZIAN, GEORG RUDIGER |  |
|                              | <b>Examiner</b><br>DANIELLE SULLIVAN | <b>Art Unit</b><br>1616                       |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 27 January 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-6, 8 and 9 is/are pending in the application.
- 4a) Of the above claim(s) 2 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 3-6, 8 and 9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

Claims 1-6, 8 and 9 are pending examination.

### ***Election/Restrictions***

The Examiner acknowledges receipt of Applicant's response to the restriction requirement filed on 1/27/2009. Applicant elected with traverse Group I, claim(s) 1-4. Applicant further elected a species of compound b). Applicant traversed on the grounds that Inventions of Groups I and II should be examined together because Group II only differs in the addition of a safener and do not have a utility separate from the subject matter of Group I. Furthermore, Applicants believe examining Groups I and II will not place a serious burden on the Examiner. The Examiner has found Applicants argument persuasive.

Claims 1-6 and 8-9 are pending. Claims 1, 3-6 and 8-9 are presented for examination on the merits as they read upon the elected subject matter. Claim 2 is withdrawn from consideration as being drawn to non-elected subject matter.

Claim 2 withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected compound b), there being no allowable generic or linking claim.

Applicant's election of clodinafop in the reply filed on 1/27/2009 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-6, 8 and 9 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for the combination of 30 g/ha of pyribenzoxim and 12.5-20 g/ha clodinafop does not reasonably provide enablement for any synergistically effective amount. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make the invention commensurate in scope with these claims.

Claims 1-6, 8 and 9 recite a synergistically effective amount of a compound selected from clodinafop. Claims 5, 6, 8 and 9 recite an amount, effective for herbicide antagonism, of a compound selected from benoxacor, fenclorim, dichlormid and mefenpyr-diethyl.

Attention is directed to *In re Wands*, 8 USPQ2d 1400 (CAFC 1988) at 1404 where the court set forth the eight factors to consider when assessing if a disclosure would have required undue experimentation. Citing *Ex parte Forman*, 230 USPQ 546 (BdApls 1986) at 547 the court recited eight factors:

- 1) the nature of the invention
- 2) the state of the prior art
- 3) the relative skill of those in the art
- 4) the predictability of the art
- 5) the breadth of the claims
- 6) the amount of direction or guidance provided
- 7) the presence or absence of working examples

8) the quantity of experimentation necessary

The instant specification fails to provide guidance that would allow the skilled artisan to practice the instant invention without resorting to undue experimentation, as discussed in the subsections set forth herein below.

***The nature of the invention.***

The claimed invention relates to a synergistic herbicidal composition comprising pyribenzoxim and a synergistically effective amount of a compound selected from clodinafop. Additionally, an amount, effective for herbicide antagonism of a safener may be included.

***The state of the prior art & predictability of the art***

It is generally accepted that synergy/antagonism must be demonstrated in order to show unexpected results. Also, synergy can only be enabled for the specific combinations which show synergy relative to the concentration of each structure.

***The breadth of the claims***

The recitation of a synergistic herbicidal composition comprising pyribenzoxim and a synergistically effective amount of a compound selected from clodinafop is broad. First, synergy has not been demonstrated for every known herbicide at every concentration. Further, synergy has only been demonstrated for the combination of 30 g/ha of pyribenzoxim and 12.5-20 g/ha clodinafop. The antagonism of the additional safener has not been demonstrated.

***The presence or absence of working examples***

The specification provides detailed evaluation for the combination of 30 g/ha of pyribenzoxim and 12.5-20 g/ha clodinafop. However, the data is not commensurate in scope with the claims and synergy has not been demonstrated for any synergistically effective amount of clodinafop.

***The quantity of experimentation necessary & relative skill in the art***

To determine how to make all synergistic herbicidal compositions of pyribenzoxim and clodinafop would require undue experimentation for one skilled in the art.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3-6, 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baltruschat et al. (US 2002/0055435).

***Applicant's Invention***

Applicant claims an herbicidal synergistic composition comprising a) pyribenzoxim and b) a synergistically effective amount of at least one compound selected from clodinafop. Claims 5 and 6 further add an amount, effective for herbicide antagonism of a compound selected from benoxacor, fenclorim, dichlormid and mefenpyr-diethyl, where claim 6 further limits the compound to benoxacor. Claims 3

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and 8 specify a method of controlling undesired plant growth comprising allowing a herbicidally effective amount of the composition to act on the crop plant or the locus.

Claims 4 and 9 specify the crop plant is rice.

### **Determination of the scope and the content of the prior art**

#### **(MPEP 2141.01)**

Baltruschat et al. teach herbicidal mixtures comprising: a synergistically effective amount of formula (1) and at least one additional herbicidal compound (2) which provides a synergistic effect against weeds. A method of controlling weeds by applying the composition to a locus is also disclosed (abstract). The treatment may be used to control a broad spectrum of weed species in crops, especially cereals, such as rice [0521-0524]. Safeners (3) selected from benoxacor, fenclorim, dichlormid, or mefenpyr are preferred for use to reduce the injury of crop plants ([0017], [0193-0194]). Claim 5 specifies the additional herbicide compound (2) is selected from a) lipid biosynthesis inhibitors, including clodinafop and b) an acetolactate synthase inhibitor, including pyribenzoxim (claim 5). The application rates of the lipid biosynthesis inhibitors range from 25 to 2500 g/ha and the acetolactate synthase inhibitor ranges from 1 to 800 g/ha [0532].

### **Ascertainment of the difference between the prior art and the claims**

#### **(MPEP 2141.02)**

Baltruschat et al. do not envisage a specific formulation comprising clodinafop and pyribenzoxim, however, the fact that they are taught as additional herbicides and the compositions comprise at least one of these compounds provides motivation to

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combine the two agents together. It would be prima facie obvious to combine two compositions each of which is taught by the prior art to be useful for the same purpose in order to form a third composition that is to be used for the very same purpose; the idea of combining them flows logically from their having been individually taught in prior art.” In re Kerkhoven 205 USPQ 1069, (C.C.P.A. 1980). Thus, combining pyribenzoxim with clodinafop is prima facie obvious. Although, formula I is additionally taught as a compound in the formulation does not teach away from combining the additional herbicides clodinafop and pyribenzoxim, because the claims recite comprising language. Furthermore, the showing of synergy in the specification is not commensurate in scope with the claims. Hence, Baltruschat et al. provides motivation combine to clodinafop with pyribenzoxim.

### **Finding of prima facie obviousness**

#### **Rationale and Motivation (MPEP 2142-2143)**

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Baltruschat et al. to include the additional herbicides pyribenzoxim and clodinafop. One would have been motivated to include this combination because Baltruschat et al. teach that they are both additional herbicidal ingredients, therefore combining them is prima facie obvious.



***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Danielle Sullivan whose telephone number is (571) 270-3285. The examiner can normally be reached on 7:30 AM - 5:00 PM Mon-Thur EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Johann Richter can be reached on (571) 272-0646. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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